

ORDER FOR SUPPLIES OR SERVICES

PAGE OF PAGES
1 4

IMPORTANT: Mark all packages and papers with contract and/or order numbers.

1. DATE OF ORDER 08/18/2014		2. CONTRACT NO. (If any) EP-C-12-053		6. SHIP TO: a. NAME OF CONSIGNEE Region 2	
3. ORDER NO. 0005		4. REQUISITION/REFERENCE NO. PR-R2-14-00285			
5. ISSUING OFFICE (Address correspondence to) (FOR U.S. MAIL ONLY) US Environmental Protection Agency 26 West Martin Luther King Drive Mail Code: NWD Cincinnati OH 45268				b. STREET ADDRESS US Environmental Protection Agency 290 Broadway	
				c. CITY New York	e. ZIP CODE 10007-1866
7. TO: (b)(4)				f. SHIP VIA	
a. NAME OF CONTRACTOR CADMUS GROUP, INC., THE				8. TYPE OF ORDER	
b. COMPANY NAME				<input type="checkbox"/> a. PURCHASE <input checked="" type="checkbox"/> b. DELIVERY Except for billing instructions on the reverse, this delivery order is subject to instructions contained on this side only of this form and is issued subject to the terms and conditions of the above-numbered contract.	
c. STREET ADDRESS 57 WATER STREET 6176737000				REFERENCE YOUR:	
d. CITY WATERTOWN				e. STATE MA	f. ZIP CODE 024724603
9. ACCOUNTING AND APPROPRIATION DATA See Schedule				10. REQUISITIONING OFFICE CPD	
11. BUSINESS CLASSIFICATION (Check appropriate box(es)) <input type="checkbox"/> a. SMALL <input type="checkbox"/> b. OTHER THAN SMALL <input type="checkbox"/> c. DISADVANTAGED <input type="checkbox"/> d. WOMEN-OWNED <input type="checkbox"/> e. HUBZone <input type="checkbox"/> f. SERVICE-DISABLED VETERAN-OWNED <input type="checkbox"/> g. WOMEN-OWNED SMALL BUSINESS (WOSB) ELIGIBLE UNDER THE WOSB PROGRAM <input type="checkbox"/> h. EDWOSB					12. F.O.B. POINT Destination

13. PLACE OF		14. GOVERNMENT B/L NO.	15. DELIVER TO F.O.B. POINT ON OR BEFORE (Date)	16. DISCOUNT TERMS
a. INSPECTION Destination	b. ACCEPTANCE Destination			

17. SCHEDULE (See reverse for Rejections)

ITEM NO. (a)	SUPPLIES OR SERVICES (b)	QUANTITY ORDERED (c)	UNIT (d)	UNIT PRICE (e)	AMOUNT (f)	QUANTITY ACCEPTED (g)
	DUNS Number: (b)(4) TOPO: Antony Tseng Max Expire Date: 03/27/2018 Continued ...					

SEE BILLING INSTRUCTIONS ON REVERSE	18. SHIPPING POINT		19. GROSS SHIPPING WEIGHT		20. INVOICE NO.		17(h) TOTAL (Cont. pages)
	21. MAIL INVOICE TO:						
	a. NAME RTP Finance Center						\$150,515.00
	b. STREET ADDRESS (or P.O. Box) US Environmental Protection Agency RTP-Finance Center Mail Drop D143-02 109 TW Alexander Drive						\$150,515.00
c. CITY Durham			d. STATE NC	e. ZIP CODE 27711		17(i) GRAND TOTAL	

22. UNITED STATES OF AMERICA BY (Signature) 08/18/2014

Noelle Mills

ELECTRONIC SIGNATURE

23. NAME (Typed)
Noelle Mills
TITLE: CONTRACTING/ORDERING OFFICER

ORDER FOR SUPPLIES OR SERVICES
SCHEDULE - CONTINUATION

PAGE NO

2

IMPORTANT: Mark all packages and papers with contract and/or order numbers.

DATE OF ORDER

CONTRACT NO.

ORDER NO.

08/18/2014

EP-C-12-053

0005

ITEM NO. (a)	SUPPLIES/SERVICES (b)	QUANTITY ORDERED (c)	UNIT (d)	UNIT PRICE (e)	AMOUNT (f)	QUANTITY ACCEPTED (g)
0001	<p>Admin Office: CPOD US Environmental Protection Agency 26 West Martin Luther King Drive Mail Code: NWD Cincinnati OH 45268 Period of Performance: 08/18/2014 to 07/17/2015</p> <p>Provide services in accordance with attached Performance Work Statement entitled, "Lake Ontario Nearshore Watershed Nutrient Total Maximum Daily Load (TMDL) Work". This task order award is a result of RFP PR-R2-14-00286.</p> <p>Level of Effort: 2,632</p> <p>The government will make provisional fixed fee payments on the basis of percentage of work completed. For CPFF-term-type task orders, percentage of work completed is the ratio of direct labor hours performed to the direct labor hours ordered.</p> <p>Accounting Info: 14-15-B-02N-202BJ7-2505-1402HE1157-001 BFY: 14 EFY: 15 Fund: B Budget Org: 02N Program (PRC): 202BJ7 Budget (BOC): 2505 DCN - Line ID: 1402HE1157-001 Funding Flag: Partial Funded: \$150,515.00</p>				(b)(4)	

TOTAL CARRIED FORWARD TO 1ST PAGE (ITEM 17(H))

\$150,515.00

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OPTIONAL FORM 348 (Rev. 4/2006)

Prescribed by GSA FAR (48 CFR) 53.213(f)

PERFORMANCE WORK STATEMENT

TSAWP IDIQ MULTIPLE-AWARD CONTRACT SOLICITATION PR-R2-14-00285

LAKE ONTARIO NEARSHORE WATERSHED NUTRIENT TOTAL MAXIMUM DAILY LOAD (TMDL) WORK

A. Background

The purpose of this Task Order is assist the government in reducing and limiting NPS phosphorus loading that are contributing to harmful algal blooms in the nearshore and further the development of non-toxic TMDLs in Great Lakes Priority Watersheds.

The College at Brockport State University of New York recently published 6 volumes as part of The Genesee River Project, conducted from August 2010 to August 2013. The project provides a detailed picture of sediment and phosphorus concentrations (e.g., weekly water chemistry sampling), nutrient loading, allocation and identification of phosphorus sources, and the effectiveness of management practices on the four major Genesee River tributaries (Canaseraga, Honeoye, Black, and Oatka Creeks), the Upper Genesee River, and the lower Genesee River.

- Volume 1: http://digitalcommons.brockport.edu/tech_rep/124/
- Volume 2: http://digitalcommons.brockport.edu/tech_rep/125/
- Volume 3: http://digitalcommons.brockport.edu/tech_rep/126/
- Volume 4: http://digitalcommons.brockport.edu/tech_rep/127/
- Volume 5: http://digitalcommons.brockport.edu/tech_rep/128/
- Volume 6: http://digitalcommons.brockport.edu/tech_rep/129/

The Lake Ontario Coastal Initiative published the following literature on Oak Orchard Creek:

- http://ceinfo.org/images/loci/tmdl/factsheets/LOCI_TMDL_OakOrchardCreek.pdf
- http://www.epa.gov/greatlakes/lakeont/reports/lo_oakorchard.pdf
- <http://ceinfo.org/index.php/water/93-water-loci/water-past-work/120-tmdl-project-water-quality-restoration-strategy>
- http://ceinfo.org/images/loci/tmdl/WQRS/WQRS_2011_Upper_Oak_Orchard_Creek_FINL.pdf
- http://ceinfo.org/images/loci/tmdl/DataReports/Upper_OOC_Data_Report_FINL.pdf

LOCI identified a number of agricultural “targets” as part of their project steps.

Beginning in 2012, the Monroe County Department of Environmental Services and the Stormwater Coalition of Monroe County, began work on a comprehensive Stormwater Master Plan. The goals of the Master Plan are to evaluate the status of the MS4 program and to develop a strategy for long term funding to advance and sustain the program. In 2013, staff at SUNY Brockport undertook a project to monitor and model sewer discharges from Rochester to the Genesee titled “The Impact of Rochester Storm Sewers on the Water quality of the Lower Genesee: a Modeling Approach using PCSWMM” (Dressel, Makarawicz 2014):

- http://digitalcommons.brockport.edu/env_theses/89/

As a result, the stormwater master plan will also contain a retrofit plan for both separate and combined sewers in the City of Rochester. This work includes conducting assessments of targeted watersheds to which some of the assessment and retrofit plans have been done by County Staff and currently Malcolm Pirnie/Arcadis is under contract to conduct four assessment/retrofit plans by the end of 2014. As another logical byproduct in 2013, a Green Infrastructure Rapid Assessment Plan was published for the Larkin Creek Watershed:

- <http://www.monroecounty.gov/File/DES/Stormwater/Larkin%20Creek%20-%20Final%20Report.pdf>

In 2008, EPA contractor support has also provided NYSDEC with draft TMDL documents for Honeoye Lake and Conesus Lake using the ArcView Generalized Watershed Loading Function (AVGWLF) watershed model in combination with the BATHTUB lake response model.

Other reports of interest include:

- http://www.epa.gov/greatlakes/lakeont/reports/lo_oakorchard.pdf

B. Tasks

SPECIAL POINTS OF INTEREST

All deliverables developed at any time in this Task Order must be provided to the Task Order COR in electronic formats that is supported (i.e. PDF) and can be edited (i.e. Word, Excel) by EPA. GIS data must be in ArcGIS format.

Electronic deliverables can be transmitted to EPA using a data CD, data DVD, USB flash drive, and/or an external USB drive.

All GIS and TMDL allocation deliverables will be accompanied by an electronic crosswalk table or GIS layer based on NHDPlus Version 2's NHDPlusCatchment layer. The NHDPlus Website for NHDPlus Version 2 can be found at:
http://www.horizon-systems.com/NHDPlus/NHDPlusV2_data.php.

No duplication of work is requested.

The expression of loads in all the deliverables shall be in daily loads, unless otherwise indicated. The contractor is referred to the draft document entitled "Options for Expressing Daily Loads in TMDLs" dated June 22, 2007, for further technical guidance:
http://water.epa.gov/lawsregs/lawsguidance/cwa/tmdl/upload/2007_06_26_tmdl_draft_daily_loads_tech-2.pdf.

Task 1: Oak Orchard Creek

A direct tributary to Lake Ontario which has been identified as a significant contributor of phosphorus to the nearshore area is Oak Orchard Creek. This creek is also listed as impaired. DEC Great Lakes staff are highly supportive of the development of a TMDL for this waterbody. SUNY Brockport has completed assessments of the Creek and thus some modeling and monitoring data exists. The contractor shall consult all available sources of modeling and monitoring data which includes, but not limited to, SUNY Brockport, USGS NWIS, EPA's STORET, SWCDs, NRCS, dischargers, and farms.

The contractor shall submit a modeling QAPP(s) as applicable to the activities requested in this task. The contractor may elect to develop either a combined QAPP or separate QAPPs for Task 1 and each of the optional Tasks, if exercised in this Task Order. The contractor shall submit for review and approval the QAPP to the Task Order COR (TOCOR) and the EPA QA officer to be specified by the TOCOR. The contractor will allow a 30 day review period for EPA to evaluate draft and final QAPP deliverables. The QAPP shall conform to EPA G5/M (December 2002, EPA/240/R-02/007) and G5/G (March 2003, EPA/240/R-03/003).

The pollutant of concern is phosphorus. The contractor shall review the available reports and data for Oak Orchard Creek and complete the following:

- An early assessment to determine data gaps versus whether additional monitoring is required.
- Source identification and disaggregation by municipal boundaries for stormwater.
- Re-characterization of phosphorus loads from WWTPs and alternatives to an "all or nothing" approach of restoration scenarios.
- A comprehensive implementation plan including the nine elements that must be addressed in 319 watershed plans.
- Monthly reports to assess progress and conference calls when needed.
- Support the engagement and integration activities of EPA and NYSDEC which may include:
 - coordination with SWCDs, NRCS, dischargers, and farms; and
 - formation of a Citizens Advisory Committee.

The contractor shall produce a TMDL support document that meets regulatory requirements for a TMDL as specified in Appendix A of this Task Order.

The contractor shall submit all data (e.g. GIS, spreadsheets, model code, modeling inputs/outputs, etc.) to the TOCOR upon completion of the TMDL support deliverables. The data must also be accompanied by an inventory list describing the all data used.

The contractor shall provide all GIS data, including metadata files: Metadata shall be developed for project-generated GIS and shall accompany the GIS deliverables. Metadata shall be compliant with the "Content Standard for Digital Geospatial Metadata" approved by the Federal Geographic Data Committee (FGDC). Metadata compliance can be checked using the following tool: <http://geo-nsdi.er.usgs.gov/validate.php>

The contractor shall also prepare an electronic library of the administrative records containing documents that support the establishment of and calculations/allocations for each of the TMDL support document deliverables. Components of the record shall include all materials relied upon to develop and support the calculations/allocations in the TMDL, including any data, analyses, or scientific/technical references that were used, records of correspondence with stakeholders and EPA, the contractor's assistance to the TOCOR in responding to public comments, and other supporting materials. This record is needed to facilitate public and/or EPA review of the TMDL. The contractor can exclude copyrighted material from the electronic library, but must include the reference in the Index of the Administrative Record required of each of the TMDL support documents. Any material in the Index of the Administrative Record should be properly cited in the TMDL support document deliverables. Any references made in the TMDL support documents should be properly documented in its Index of the Administrative Record.

Optional Task 2: Honeoye Lake

Honeoye Lake is a class AA lake. Based upon available data, chl-a is around 17.9 ug/L, which is substantially higher than the endpoints being developed by NYSDEC staff to be supportive of the drinking water best use. The contractor shall consult all available sources of modeling and monitoring data which includes, but not limited to, 2008 AVGWL/BATHTUB TMDL draft reports, SUNY Brockport, USGS NWIS, EPA's STORET, SWCDs, NRCS, dischargers, and farms.

The contractor shall submit a modeling QAPP(s) as applicable to the activities requested in this task. The contractor may elect to develop either a combined QAPP under Task 1 or separate QAPPs for Task 1 and each of the optional Tasks, if exercised in this Task Order. The contractor shall submit for review and approval the QAPP to the Task Order COR (TOCOR) and the EPA QA officer to be specified by the TOCOR. The contractor will allow a 30 day review period for EPA to evaluate draft and final QAPP deliverables. The QAPP shall conform to EPA G5/M (December 2002, EPA/240/R-02/007) and G5/G (March 2003, EPA/240/R-03/003).

The pollutant of concern is phosphorus and "low dissolved oxygen". The contractor shall review the available reports and data for Honeoye Lake and complete the following:

- An early assessment to determine data gaps versus whether additional monitoring is required.
- Source identification and disaggregation by municipal boundaries for stormwater.
- Update identification and quantification pollutant sources, such as land use.
- Re-characterization of phosphorus loads from WWTPs and alternatives to an "all or nothing" approach of restoration scenarios.
- A comprehensive implementation plan including the nine elements that must be addressed in 319 watershed plans.
- Monthly reports to assess progress and conference calls when needed.
- Support the engagement and integration activities of EPA and NYSDEC which may include:
 - coordination with SWCDs, NRCS, dischargers, and farms; and
 - formation of a Citizens Advisory Committee.

The contractor shall produce a TMDL support document that meets regulatory requirements for a TMDL as specified in Appendix A of this Task Order.

The contractor shall submit all data (e.g. GIS, spreadsheets, model code, modeling inputs/outputs, etc.) to the TOCOR upon completion of the TMDL support deliverables. The data must also be accompanied by an inventory list describing the all data used.

The contractor shall provide all GIS data, including metadata files: Metadata shall be developed for project-generated GIS and shall accompany the GIS deliverables. Metadata shall be compliant with the "Content Standard for Digital Geospatial Metadata" approved by the Federal Geographic Data Committee (FGDC). Metadata compliance can be checked using the following tool: <http://geo-nsdi.er.usgs.gov/validate.php>

The contractor shall also prepare an electronic library of the administrative records containing documents that support the establishment of and calculations/allocations for each of the TMDL support document deliverables. Components of the record shall include all materials relied upon to develop and support the calculations/allocations in the TMDL, including any data, analyses, or scientific/technical references that were used, records of correspondence with stakeholders and EPA, the contractor's assistance to the TOCOR in responding to public comments, and other supporting materials. This record is needed to facilitate public and/or EPA review of the TMDL. The contractor can exclude copyrighted material from the electronic library, but must include the reference in the Index of the Administrative Record required of each of the TMDL support documents. Any material in the Index of the Administrative Record should be properly cited in the TMDL support document deliverables. Any references made in the TMDL support documents should be properly documented in its Index of the Administrative Record.

Optional Task 3: Conesus Lake

A class AA lake. Chlorophyll-a concentrations are lower at 7.1 ug/L, but is still higher than the endpoint for drinking water. Cadmus also began work on this; we would like to see a final TMDL as well. The contractor shall consult all available sources of modeling and monitoring data which includes, but not limited to, 2008 AVGWLFB/BATHTUB TMDL draft reports, SUNY Brockport, USGS NWIS, EPA's STORET, SWCDs, NRCS, dischargers, and farms.

The contractor shall submit a modeling QAPP(s) as applicable to the activities requested in this task. The contractor may elect to develop either a combined QAPP under Task 1 or separate QAPPs for Task 1 and each of the optional Tasks, if exercised in this Task Order. The contractor shall submit for review and approval the QAPP to the Task Order COR (TOCOR) and the EPA QA officer to be specified by the TOCOR. The contractor will allow a 30 day review period for EPA to evaluate draft and final QAPP deliverables. The QAPP shall conform to EPA G5/M (December 2002, EPA/240/R-02/007) and G5/G (March 2003, EPA/240/R-03/003).

The pollutant of concern is phosphorus and "low dissolved oxygen". The contractor shall review the available reports and data for Conesus Lake and complete the following:

- An early assessment to determine data gaps versus whether additional monitoring is required.

- Source identification and disaggregation by municipal boundaries for stormwater.
- Update identification and quantification pollutant sources, such as land use.
- Re-characterization of phosphorus loads from WWTPs and alternatives to an "all or nothing" approach of restoration scenarios.
- A comprehensive implementation plan including the nine elements that must be addressed in 319 watershed plans.
- Monthly reports to assess progress and conference calls when needed.
- Support the engagement and integration activities of EPA and NYSDEC which may include:
 - coordination with SWCDs, NRCS, dischargers, and farms; and
 - formation of a Citizens Advisory Committee.

The contractor shall produce a TMDL support document that meets regulatory requirements for a TMDL as specified in Appendix A of this Task Order.

The contractor shall submit all data (e.g. GIS, spreadsheets, model code, modeling inputs/outputs, etc.) to the TOCOR upon completion of the TMDL support deliverables. The data must also be accompanied by an inventory list describing the all data used.

The contractor shall provide all GIS data, including metadata files: Metadata shall be developed for project-generated GIS and shall accompany the GIS deliverables. Metadata shall be compliant with the "Content Standard for Digital Geospatial Metadata" approved by the Federal Geographic Data Committee (FGDC). Metadata compliance can be checked using the following tool: <http://geo-nsdi.er.usgs.gov/validate.php>

The contractor shall also prepare an electronic library of the administrative records containing documents that support the establishment of and calculations/allocation for each of the TMDL support document deliverables. Components of the record shall include all materials relied upon to develop and support the calculations/allocation in the TMDL, including any data, analyses, or scientific/technical references that were used, records of correspondence with stakeholders and EPA, the contractor's assistance to the TOCOR in responding to public comments, and other supporting materials. This record is needed to facilitate public and/or EPA review of the TMDL. The contractor can exclude copyrighted material from the electronic library, but must include the reference in the Index of the Administrative Record required of each of the TMDL support documents. Any material in the Index of the Administrative Record should be properly cited in the TMDL support document deliverables. Any references made in the TMDL support documents should be properly documented in its Index of the Administrative Record.

Optional Task 4: Hemlock Lake

Hemlock is AA(T) lake which is also a water supply reservoir for the City of Rochester. Hemlock is NOT currently listed on the 303(d) list but the drinking water use is listed as threatened on the state's Priority Waterbodies List. A TMDL developed for this lake will ensure this drinking water source remains unimpaired. Sampling data should be available, but EPA and NYSDEC are unaware of any other work completed for this waterbody. The contractor shall

consult all available sources of modeling and monitoring data which includes, but not limited to, SUNY Brockport, USGS NWIS, EPA's STORET, SWCDs, NRCS, dischargers, and farms.

The contractor shall submit a modeling QAPP(s) as applicable to the activities requested in this task. The contractor may elect to develop either a combined QAPP under Task 1 or separate QAPPs for Task 1 and each of the optional Tasks, if exercised in this Task Order. The contractor shall submit for review and approval the QAPP to the Task Order COR (TOCOR) and the EPA QA officer to be specified by the TOCOR. The contractor will allow a 30 day review period for EPA to evaluate draft and final QAPP deliverables. The QAPP shall conform to EPA G5/M (December 2002, EPA/240/R-02/007) and G5/G (March 2003, EPA/240/R-03/003).

The pollutant of concern is phosphorus. The contractor shall review the available reports and data for Hemlock Lake and complete the following:

- An early assessment to determine data gaps versus whether additional monitoring is required.
- Source identification and disaggregation by municipal boundaries for stormwater.
- Re-characterization of phosphorus loads from WWTPs and alternatives to an "all or nothing" approach of restoration scenarios.
- A comprehensive implementation plan including the nine elements that must be addressed in 319 watershed plans.
- Monthly reports to assess progress and conference calls when needed.
- Support the engagement and integration activities of EPA and NYSDEC which may include:
 - coordination with SWCDs, NRCS, dischargers, and farms; and
 - formation of a Citizens Advisory Committee.

The contractor shall produce a TMDL support document that meets regulatory requirements for a TMDL as specified in Appendix A of this Task Order.

The contractor shall submit all data (e.g. GIS, spreadsheets, model code, modeling inputs/outputs, etc.) to the TOCOR upon completion of the TMDL support deliverables. The data must also be accompanied by an inventory list describing the all data used.

The contractor shall provide all GIS data, including metadata files: Metadata shall be developed for project-generated GIS and shall accompany the GIS deliverables. Metadata shall be compliant with the "Content Standard for Digital Geospatial Metadata" approved by the Federal Geographic Data Committee (FGDC). Metadata compliance can be checked using the following tool: <http://geo-nsdi.er.usgs.gov/validate.php>

The contractor shall also prepare an electronic library of the administrative records containing documents that support the establishment of and calculations/allocations for each of the TMDL support document deliverables. Components of the record shall include all materials relied upon to develop and support the calculations/allocations in the TMDL, including any data, analyses, or scientific/technical references that were used, records of correspondence with stakeholders and EPA, the contractor's assistance to the TOCOR in responding to public comments, and other supporting materials. This record is needed to facilitate public and/or EPA review of the TMDL.

The contractor can exclude copyrighted material from the electronic library, but must include the reference in the Index of the Administrative Record required of each of the TMDL support documents. Any material in the Index of the Administrative Record should be properly cited in the TMDL support document deliverables. Any references made in the TMDL support documents should be properly documented in its Index of the Administrative Record.

Optional Task 5: City of Rochester GI assessments

Monroe County is proposing green infrastructure assessments for the City of Rochester. Planning is needed to properly site and design GI projects. Once build, GI projects would have a direct impact on phosphorus and pathogen loads to the lower Genesee River and the Rochester Embayment. The contractor shall complete assessments performing the same analysis applied as the report for Larkin Creek for the Lower Genesee River - see

[http://www.monroecounty.gov/File/DES/Stormwater/Larkin%20Creek%20-](http://www.monroecounty.gov/File/DES/Stormwater/Larkin%20Creek%20-%20Final%20Report.pdf)

[%20Final%20Report.pdf](http://www.monroecounty.gov/File/DES/Stormwater/Larkin%20Creek%20-%20Final%20Report.pdf). A retrofit plan is needed for this very important waterbody. The Lower Genesee River is an 11.7 mile segment running north from the NYS Barge Canal to the mouth. It passes thru the City of Rochester, the largest population center in the watershed, with some 200,000 residents and a mix a commercial, residential, and industrial land use. The sewer collection system in Rochester is owned and operated by the Monroe County Department of Environmental Services. The collection system is a mix of combination and separate sewers. In the 1980's and early 1990's a deep rock tunnel system was constructed to collect combined sewer overflows and provide storage and conveyance to the Frank E. Van Lare Wastewater Treatment Plant. This combined sewer overflow abatement program (CSOAP) has been a huge success and has reduced pollutant loads to the Genesee and Lake Ontario.

The contractor shall submit a geospatial data QAPP(s) as applicable to the activities requested in this task. The contractor may elect to develop either a combined QAPP under Task 1 or separate QAPPs for Task 1 and each of the optional Tasks, if exercised in this Task Order. The contractor shall submit for review and approval the QAPP to the Task Order COR (TOCOR) and the EPA QA officer to be specified by the TOCOR. The contractor will allow a 30 day review period for EPA to evaluate draft and final QAPP deliverables. The QAPP shall conform to G5/G (March 2003, EPA/240/R-03/003).

The contractor shall also produce a GIS layer illustrating the location of suggested infrastructure changes. The contractor shall provide all GIS data including metadata files: Metadata shall be developed for project-generated GIS and shall accompany the GIS deliverables. Metadata must be compliant with the "Content Standard for Digital Geospatial Metadata" approved by the Federal Geographic Data Committee (FGDC). Metadata compliance can be checked using the following tool: <http://geo-nsdi.er.usgs.gov/validate.php>

Optional Task 6: Great Lakes GIS support

The contractor shall submit a geospatial data QAPP(s) as applicable to the activities requested in this task. The contractor may elect to develop either a combined QAPP under Task 1 or separate QAPPs for Task 1 and each of the optional Tasks, if exercised in this Task Order. The contractor shall submit for review and approval the QAPP to the Task Order COR (TOCOR) and the EPA

QA officer to be specified by the TOCOR. The contractor will allow a 30 day review period for EPA to evaluate draft and final QAPP deliverables. The QAPP shall conform to G5/G (March 2003, EPA/240/R-03/003).

The contractor shall produce an electronic crosswalk table and GIS layer based on the following three sets of GIS coverages:

1. NHDPlus Version 2's NHDPlusCatchment layer;
2. NYS DEC's Waterbody Inventory Priority Waterbodies List (WIPWL):
 - a. <https://catalog.data.gov/dataset/nysdec-wiwp-rivers-and-streams-waterbody-inventory-and-priority-waterbodies-list-nys-wipw-8a108>
 - b. <http://catalog.data.gov/dataset/nysdec-wiwp-lakes-and-reservoirs-waterbody-inventory-and-priority-waterbodies-list-nys-wi-eab3b>
 - c. <http://catalog.data.gov/dataset/nysdec-wiwp-shorelines-waterbody-inventory-and-priority-waterbodies-list-nys-wipwl-shorel>
 - d. <http://catalog.data.gov/dataset/nysdec-wiwp-estuaries-waterbody-inventory-and-priority-waterbodies-list-nys-wiwp-estuary-7643b>
3. Great Lake's watershed boundaries at <http://water.usgs.gov/wsc/reg/04.html>.

The contractor shall also produce a GIS layer that dissolves multiple NHDPlus catchments with the same WIPWL PWL_ID values.

The contractor shall provide all GIS data including metadata files: Metadata shall be developed for project-generated GIS and shall accompany the GIS deliverables. Metadata must be compliant with the "Content Standard for Digital Geospatial Metadata" approved by the Federal Geographic Data Committee (FGDC). Metadata compliance can be checked using the following tool: <http://geo-nsdi.er.usgs.gov/validate.php>

C. Schedule Of Benchmarks & Deliverables

All deliverables developed at any time in this work must be provided to the TOCOR in electronic formats that can be supported (i.e. PDF) and can be edited (i.e. Word, Excel) by EPA. All electronic deliverables must also be in a format that can be supported by EPA after the end of the Reports must be of high quality and 508 complaint: Work must reflect a high level of technical proficiency and be clearly explained and documented. The contractor shall include a certification of 508 compliance with each final electronic deliverable (see Section G).

Base Year:

Task No.	Deliverable	Schedule
1	1.1 QAPP	Submission of Draft QAPP for review and approval within <u>30</u> calendar days of award. Submission of Final QAPP with contractor signatures that incorporates EPA QA Officer comments with <u>14</u> calendar days of receipt of EPA QA Officer's comments.
	1.2 TMDL deliverable	Draft deliverable within <u>10</u> months of award Final deliverable within <u>11</u> months of award

Task No.	Deliverable	Schedule
	1.3 Project Data	Final deliverable within <u>11</u> months of award
	1.4 Electronic Library	Final deliverable within <u>11</u> months of award
2 (optional)	2.1 QAPP	Submission of Draft QAPP for review and approval within <u>30</u> calendar days of exercise. Submission of Final QAPP with contractor signatures that incorporates EPA QA Officer comments with <u>14</u> calendar days of receipt of EPA QA Officer's comments.
	2.2 TMDL deliverable	Draft deliverable within <u>10</u> months of original TO award Final deliverable within <u>11</u> months of original TO award
	2.3 Project Data	Final deliverable within <u>11</u> months of original TO award
	2.4 Electronic Library	Final deliverable within <u>11</u> months of original TO award
3 (optional)	3.1 QAPP	Submission of Draft QAPP for review and approval within <u>30</u> calendar days of exercise. Submission of Final QAPP with contractor signatures that incorporates EPA QA Officer comments with <u>14</u> calendar days of receipt of EPA QA Officer's comments.
	3.2 TMDL deliverable	Draft deliverable within <u>10</u> months of original TO award Final deliverable within <u>11</u> months of original TO award
	3.3 Project Data	Final deliverable within <u>11</u> months of original TO award
	3.4 Electronic Library	Final deliverable within <u>11</u> months of original TO award
4 (optional)	4.1 QAPP	Submission of Draft QAPP for review and approval within <u>30</u> calendar days of exercise. Submission of Final QAPP with contractor signatures that incorporates EPA QA Officer comments with <u>14</u> calendar days of receipt of EPA QA Officer's comments.
	4.2 TMDL deliverable	Draft deliverable within <u>10</u> months of original TO award Final deliverable within <u>11</u> months of original TO award
	4.3 Project Data	Final deliverable within <u>11</u> months of original TO award
	4.4 Electronic Library	Final deliverable within <u>11</u> months of original TO award

Task No.	Deliverable	Schedule
5 (optional)	5.1 QAPP	Submission of Draft QAPP for review and approval within <u>30</u> calendar days of exercise. Submission of Final QAPP with contractor signatures that incorporates EPA QA Officer comments with <u>14</u> calendar days of receipt of EPA QA Officer's comments.
	5.2 GI assessments	Draft deliverable within <u>10</u> months of original TO award Final deliverable within <u>11</u> months of original TO award
	5.3 GIS Layer	Draft deliverable within <u>10</u> months of original TO award Final deliverable within <u>11</u> months of original TO award
6 (optional)	6.1 QAPP	Submission of Draft QAPP for review and approval within <u>30</u> calendar days of exercise. Submission of Final QAPP with contractor signatures that incorporates EPA QA Officer comments with <u>14</u> calendar days of receipt of EPA QA Officer's comments.
	6.2 GIS layers	Draft deliverable within <u>10</u> months of original TO award Final deliverable within <u>11</u> months of original TO award

D. Validation Of Section 508 Compliance Of Task Order Deliverables

The Contractor shall support the TOPO in conducting a "Final Deliverable Validation" to ensure compliance with Section 508 and the Federal Acquisition Regulations (FAR) related to "electronic and information technology (EIT) deliverables". The Contractor shall furnish certification, in writing, to the TOPO that the Contractor has complied with EPAAR Clause 1552.211-79 "Compliance with EPA Policies for Information Resources Management", including the requirement that all electronic and information technology (EIT) deliverables be Section 508 compliant in accordance with the policies referenced at <http://www.epa.gov/accessibility/>.

E. Notification Of Completion Of Task Order Deliverables

In the event the Task Order reaches thirty (30) days prior to the end of the Period of Performance in a given period, and the contractor assesses that the contractor will not be able to satisfactorily complete any of the benchmarks, milestones, or deliverables by the end of the Performance Period, the contractor shall notify the TOPO and the Contracting Officer (CO) immediately, in writing. Within five (5) business days of said notification, the TOPO, in coordination with the CO, will provide technical direction concerning use of the remaining funding to prepare and furnish to the TOPO: draft deliverables, interim work products, and any necessary working files in an electronic format which is supported by EPA.

F. Contractor Identification

Contractor personnel shall always identify themselves as Contractor employees by name and organization and physically display that information through an identification badge. Contractor personnel are prohibited from acting as the Agency's official representative.

The Contractor shall refer any questions relating to the interpretation of EPA policy, guidance, or regulation to the TOPO.

G. Conference/Meeting Support Guidance

No individual event is anticipated to exceed \$20,000. The contractor shall immediately notify the EPA Contracting Officer, PO and TOPO of any anticipated event involving support for a meeting, conference, workshop, symposium, retreat, seminar or training that may potentially incur \$20,000 or more in cost during performance. Conference expenses are all direct and indirect costs paid by the government and include any associated authorized travel and per diem expenses, room charges for official business, audiovisual use, light refreshments, registration fees, ground transportation and other expenses as defined by the Federal Travel Regulations. All outlays for conference preparation should be included, but the federal employee time for conference preparation should not be included. After notifying EPA of the potential to reach this threshold, the Contractor shall not proceed with the task(s) until authorized to do so by the Contracting Officer.

H. Quality Assurance Surveillance Plan: Per contract requirements.



I. ATTACHMENTS:

Appendix A: Required Elements of a TMDL Support Document

APPENDIX A

Required Elements of a TMDL Support Document

1. Identification of Waterbody, Pollutant of Concern, Pollutant Sources, and Priority Ranking
 - A. Description of Waterbody and Background Information
 - B. Pollutant of Concern
 - C. Pollutant Sources
 - D. Priority Ranking
 - E. Expressing the TMDL through Surrogate Measures, if applicable
2. Description of the Applicable Water Quality Standards and Numeric Water Quality Target
3. Loading Capacity - Linking Water Quality and Pollutant Sources
 - A. Loading Capacity
 - B. Cause-and-Effect Relationship between Numeric Target and Pollutant
 - C. Critical Condition(s)
4. Load Allocations (LAs)
5. Wasteload Allocations (WLAs)
6. Margin of Safety (MOS)
7. Seasonal Variation
8. Reasonable Assurance
9. Monitoring Plan to Track TMDL Effectiveness
10. Implementation Plan
11. Index of the Administrative Record

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT				1. CONTRACT ID CODE		PAGE OF PAGES 1 6	
2. AMENDMENT/MODIFICATION NO. 001		3. EFFECTIVE DATE See Block 16C		4. REQUISITION/PURCHASE REQ. NO. PR-R2-14-00285		5. PROJECT NO. (if applicable)	
6. ISSUED BY (FOR U.S. MAIL ONLY) US Environmental Protection Agency 26 West Martin Luther King Drive Mail Code: NWD Cincinnati OH 45268		CODE CPOD		7. ADMINISTERED BY (if other than Item 6) CPOD US Environmental Protection Agency 26 West Martin Luther King Drive Mail Code: NWD Cincinnati OH 45268		CODE CPOD	
8. NAME AND ADDRESS OF CONTRACTOR (No., street, county, State and ZIP Code) CADMUS GROUP, INC., THE Attn: (b)(4) 57 WATER STREET 6176737000 WATERTOWN MA 024724603				(X) 9A. AMENDMENT OF SOLICITATION NO.			
				9B. DATED (SEE ITEM 11)			
				X 10A. MODIFICATION OF CONTRACT/ORDER NO. EP-C-12-053 0005			
				10B. DATED (SEE ITEM 13) 08/18/2014			
CODE (b)(4)		FACILITY CODE					
11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS							
<input type="checkbox"/> The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods: (a) By completing Items 8 and 15, and returning _____ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGEMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. It by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified. <input type="checkbox"/> is extended, <input type="checkbox"/> is not extended.							
12. ACCOUNTING AND APPROPRIATION DATA (if required) See Schedule				Net Decrease: (b)(4)			
13. THIS ITEM ONLY APPLIES TO MODIFICATION OF CONTRACTS/ORDERS. IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.							
CHECK ONE	A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.						
	B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b).						
X	C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF: EPAAR 1552.211-73, FAR 52.243-2 and FAR 52.232-20						
	D. OTHER (Specify type of modification and authority)						
E. IMPORTANT: Contractor <input type="checkbox"/> is not, <input checked="" type="checkbox"/> is required to sign this document and return 1 copies to the issuing office.							
14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.) DUNS Number: (b)(4) The purpose of this modification is to 1.) Extend the Period of Performance to 8/17/2015, 2. Descope the Task Order by 1523 (LOE) hours in accordance with the revised PWS, 3.) Change the Contract Specialist to Katie Rechenberg and 4.) Reduce the cost and fee of the task order as follows:							
	Original	Reduction	Revised CPFF (MOD 1)				
Cost	(b)(4)		(b)(4)				
Fee							
CPFF	\$150,515	-\$45,813	\$104,702				
TOCOR: Antony Tseng Max Expire Date: 08/17/2015							
LIST OF CHANGES: Continued ...							
Excludes provided herein, all terms and conditions of the document referenced in Item 8A or 10A, as heretofore changed, remains unchanged and in full force and effect.							
15A. NAME AND TITLE OF SIGNER (Type or print) Joel Demas, Contract Mgr.				16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print) Noelle Mills			
15B. CONTRACTOR/OFFEROR 		15C. DATE SIGNED 7/15/15		16B. UNITED STATES OF AMERICA 		16C. DATE SIGNED 7/16/15	
(Signature of person authorized to sign)				(Signature of Contracting Officer)			
NSN 7540-01-152-8070 Previous edition unusable				STANDARD FORM 30 (REV. 10-83) Prescribed by GSA FAR (48 CFR) 53.243			

CONTINUATION SHEET

REFERENCE NO. OF DOCUMENT BEING CONTINUED
EP-C-12-053/0005/001PAGE OF
2 6NAME OF OFFEROR OR CONTRACTOR
CADMUS GROUP, INC., THE

ITEM NO. (A)	SUPPLIES/SERVICES (B)	QUANTITY (C)	UNIT (D)	UNIT PRICE (E)	AMOUNT (F)
	<p>Reason for Modification : Supplemental Agreement for work within scope Period Of Performance End Date changed from 17-JUL-15 to 17-AUG-15 Total Amount for this Modification: -\$45,813.00 New Total Amount for this Version: \$104,702.00 New Total Amount for this Award: \$104,702.00 Obligated Amount for this Modification: -\$45,813.00 New Total Obligated Amount for this Award: \$104,702.00 Incremental Funded Amount changed: from \$150,515.00 to \$104,702.00 Maximum Potential Expiration Date changed to : 08/17/2015 CHANGES FOR LINE ITEM NUMBER: 1 Description changed from Provide services in accordance with attached Performance Work Statement entitled, "Lake Ontario Nearshore Watershed Nutrient Total Maximum Daily Load (TMDL) Work". This task order award is a result of RFP PR-R2-14-00286.</p> <p>Level of Effort: 2,632</p> <p>The government will make provisional fixed fee payments on the basis of percentage of work completed. For CPFF-term-type task orders, percentage of work completed is the ratio of direct labor hours performed to the direct labor hours ordered. to Provide services in accordance with attached Performance Work Statement entitled, "Lake Ontario Nearshore Watershed Nutrient Total Maximum Daily Load (TMDL) Work". This task order award is a result of RFP PR-R2-14-00286.</p> <p>Level of Effort: 1,109</p> <p>The government will make provisional fixed fee payments on the basis of percentage of work completed. For CPFF-term-type task orders, percentage of work completed is the ratio of direct labor hours performed to the direct labor hours ordered.</p> <p>Total Amount changed from \$150,515.00 to \$104,702.00 Obligated Amount for this modification: -\$45,813.00 Incremental Funded Amount changed from Continued ...</p>				

CONTINUATION SHEET

REFERENCE NO. OF DOCUMENT BEING CONTINUED
EP-C-12-053/0005/001PAGE OF
3 6NAME OF OFFEROR OR CONTRACTOR
CADMUS GROUP, INC., THE

ITEM NO. (A)	SUPPLIES/SERVICES (B)	QUANTITY (C)	UNIT (D)	UNIT PRICE (E)	AMOUNT (F)
0001	<p>\$150,515.00 to \$104,702.00 End Date changed from 17-JUL-15 to 17-AUG-15</p> <p>CHANGES FOR DELIVERY LOCATION: R2 Amount changed from \$150,515.00 to \$104,702.00 Delivery Location Code: R2 Region 2 US Environmental Protection Agency 290 Broadway New York NY 10007-1866 USA</p> <p>Payment: RTP Finance Center US Environmental Protection Agency RTP-Finance Center Mail Drop D143-02 109 TW Alexander Drive Durham NC 27711</p> <p>FOB: Destination Period of Performance: 08/18/2014 to 08/17/2015</p> <p>Change Item 0001 to read as follows (amount shown is the total amount):</p> <p>Provide services in accordance with attached Performance Work Statement entitled, "Lake Ontario Nearshore Watershed Nutrient Total Maximum Daily Load (TMDL) Work". This task order award is a result of RFP PR-R2-14-00286.</p> <p>Level of Effort: 1,109</p> <p>The government will make provisional fixed fee payments on the basis of percentage of work completed. For CPFF-term-type task orders, percentage of work completed is the ratio of direct labor hours performed to the direct labor hours ordered.</p> <p>Accounting Info: 14-15-B-02N-202BJ7-2505-1402HE1157-001 BFY: 14 EFY: 15 Fund: B Budget Org: 02N Program (PRC): 202BJ7 Budget (BOC): 2505 DCN - Line ID: 1402HE1157-001 Funding Flag: Partial Funded: -\$45,813.00</p> <p>In consideration of the modification agreed to herein as complete equitable adjustments for the Contractor's Proposal dated 6/29/2015 the Continued ...</p>				(b)(4)

CONTINUATION SHEET

REFERENCE NO. OF DOCUMENT BEING CONTINUED
EP-C-12-053/0005/001

PAGE 4 OF 6

NAME OF OFFEROR OR CONTRACTOR
CADMUS GROUP, INC., THE

ITEM NO. (A)	SUPPLIES/SERVICES (B)	QUANTITY (C)	UNIT (D)	UNIT PRICE (E)	AMOUNT (F)
	Contractor hereby releases the Government from any and all liability under this task order for further equitable adjustments attributable to such facts or circumstances giving rise to the Performance Work Statement changes included in this modification. All other terms and conditions remain unchanged.				

Section B - Supplies or Services/Prices was revised as follows.

1 - Clauses was revised as follows.

Summary of Clause Changes:

Clause, 1552.211-73, is incorporated as follows:

Local Clauses 1552.211-73 LEVEL OF EFFORT - COST REIMBURSEMENT TERM CONTRACT (AUG 1995)(DEVIATION)

(a) The Contractor shall perform all work and provide all required reports within the level of effort specified below. The Government will order 1,109 direct labor hours for the base period which represents the Government's best estimate of the level of effort required to fulfill these requirements.

(b) Direct labor includes personnel such as engineers, scientists, draftsmen, technicians, statisticians, and programmers and not support personnel such as company management, typists, and key punch operators even though such support personnel are normally treated as direct labor by the Contractor. The level of effort specified in paragraph (a) includes Contractor, subcontractor, and consultant labor hours.

(c) Under any circumstances, if the Government orders or the Contractor provides less than 90 percent of the level of effort specified for the base period or any optional period exercised, an equitable downward adjustment of the fixed fee, if any, for that period will be made. The Government may require the Contractor to provide additional effort up to 110 percent of the level of effort for any period until the estimated cost for that period has been reached. However, this additional effort shall not result in any increase in the fixed fee, if any. If this is a cost-plus-incentive-fee (CPIF) contract, the term "fee" in this paragraph means "base fee and incentive fee." If this is a cost-plus-award-fee (CPAF) contract, the term "fee" in this paragraph means "base fee and award fee."

(d) If the level of effort specified to be ordered during a given base or option period is not ordered during that period, that level of effort may not be accumulated and ordered during a subsequent period.

(e) These terms and conditions do not supersede the requirements of either the "Limitation of Cost" or "Limitation of Funds" clauses.

(end of clause)

Clause, EPA-B-16-102, is incorporated as follows:

Local Clauses EPA-B-16-102 ESTIMATED COST AND FIXED FEE

(a) The estimated cost of this contract is (b)(4)

(b) The fixed fee is (b)(4)

(c) The total estimated cost and fixed fee is \$104,702.

Section F - Deliveries or Performance was revised as follows.

1 - Clauses was revised as follows.

Summary of Clause Changes:

Clause, EPA-F-12-101, is incorporated as follows:

Local Clauses EPA-F-12-101 PERIOD OF PERFORMANCE

The period of performance of this contract shall be from 8/18/2014 through 8/17/2015 inclusive of all required reports.

Section G - Contract Administration Data was revised as follows.

1 - Clauses was revised as follows.

Summary of Clause Changes:

Clause, EPA-G-42-101, is incorporated as follows:

Local Clauses EPA-G-42-101 CONTRACT ADMINISTRATION REPRESENTATIVES

Contracting Officials responsible for administering this contract are as follows:

Primary contact shall be FedConnect. CO: Noelle Mills 513-487-2171 mills.noelle@epa.gov

Contract Specialist: Katie Rechenberg 513-487-2853 rechenber.kathleen@epa.gov

PERFORMANCE WORK STATEMENT

TSAWP IDIQ MULTIPLE-AWARD CONTRACT SOLICITATION PR-R2-14-00285 MODIFICATION 001 PR-R2-15-00279

LAKE ONTARIO NEARSHORE WATERSHED NUTRIENT TOTAL MAXIMUM DAILY LOAD (TMDL) WORK

A. Background

B. Tasks

Task 1: Oak Orchard Creek

A direct tributary to Lake Ontario which has been identified as a significant contributor of phosphorus to the nearshore area is Oak Orchard Creek. This creek is also listed as impaired. DEC Great Lakes staff are highly supportive of the development of a TMDL for this waterbody. SUNY Brockport has completed assessments of the Creek and thus some modeling and monitoring data exists. The contractor shall consult all available sources of modeling and monitoring data which includes, but not limited to, SUNY Brockport, USGS NWIS, EPA's STORET, SWCDs, NRCS, dischargers, and farms.

The contractor shall submit a modeling QAPP(s) as applicable to the activities requested in this task. The contractor may elect to develop either a combined QAPP or separate QAPPs for Task 1 and each of the optional Tasks, if exercised in this Task Order. The contractor shall submit for review and approval the QAPP to the Task Order COR (TOCOR) and the EPA QA officer to be specified by the TOCOR. The contractor will allow a 30 day review period for EPA to evaluate draft and final QAPP deliverables. The QAPP shall conform to EPA G5/M (December 2002, EPA/240/R-02/007) and G5/G (March 2003, EPA/240/R-03/003).

The pollutant of concern is phosphorus. The contractor shall review the available reports and data for Oak Orchard Creek and complete the following:

- An early assessment to determine data gaps versus whether additional monitoring is required.
- Source identification and disaggregation by municipal boundaries for stormwater.
- Re-characterization of phosphorus loads from WWTPs and alternatives to an "all or nothing" approach of restoration scenarios.
- A comprehensive implementation plan including the nine elements that must be addressed in 319 watershed plans.
- Monthly reports to assess progress and conference calls when needed.
- Support the engagement and integration activities of EPA and NYSDEC which may include:
 - coordination with SWCDs, NRCS, dischargers, and farms; and

- formation of a Citizens Advisory Committee.

The contractor shall produce a technical memorandum that described the contractor's findings and steps suggested to draft a TMDL support document that meets regulatory requirements for a TMDL as specified in Appendix A of this Task Order.

Optional Task 2: Honeoye Lake

Honeoye Lake is a class AA lake. Based upon available data, chl-a is around 17.9 ug/L, which is substantially higher than the endpoints being developed by NYSDEC staff to be supportive of the drinking water best use. The contractor shall consult all available sources of modeling and monitoring data which includes, but not limited to, 2008 AVGWLF/BATHTUB TMDL draft reports, SUNY Brockport, USGS NWIS, EPA's STORET, SWCDs, NRCS, dischargers, and farms.

The contractor shall submit a modeling QAPP(s) as applicable to the activities requested in this task. The contractor may elect to develop either a combined QAPP under Task 1 or separate QAPPs for Task 1 and each of the optional Tasks, if exercised in this Task Order. The contractor shall submit for review and approval the QAPP to the Task Order COR (TOCOR) and the EPA QA officer to be specified by the TOCOR. The contractor will allow a 30 day review period for EPA to evaluate draft and final QAPP deliverables. The QAPP shall conform to EPA G5/M (December 2002, EPA/240/R-02/007) and G5/G (March 2003, EPA/240/R-03/003).

The pollutant of concern is phosphorus and "low dissolved oxygen". The contractor shall review the available reports and data for Honeoye Lake and complete the following:

- An early assessment to determine data gaps versus whether additional monitoring is required.
- Source identification and disaggregation by municipal boundaries for stormwater.
- Update identification and quantification pollutant sources, such as land use.
- Re-characterization of phosphorus loads from WWTPs and alternatives to an "all or nothing" approach of restoration scenarios.
- A comprehensive implementation plan including the nine elements that must be addressed in 319 watershed plans.
- Monthly reports to assess progress and conference calls when needed.
- Support the engagement and integration activities of EPA and NYSDEC which may include:
 - coordination with SWCDs, NRCS, dischargers, and farms; and
 - formation of a Citizens Advisory Committee.

The contractor shall produce a technical memorandum that described the contractor's findings and steps suggested to draft a TMDL support document that meets regulatory requirements for a TMDL as specified in Appendix A of this Task Order.

Optional Task 3: Conesus Lake

A class AA lake. Chlorophyll-a concentrations are lower at 7.1 ug/L, but is still higher than the endpoint for drinking water. Cadmus also began work on this; we would like to see a final TMDL as well. The contractor shall consult all available sources of modeling and monitoring data which includes, but not limited to, 2008 AVGWLFB/BATHTUB TMDL draft reports, SUNY Brockport, USGS NWIS, EPA's STORET, SWCDs, NRCS, dischargers, and farms.

The contractor shall submit a modeling QAPP(s) as applicable to the activities requested in this task. The contractor may elect to develop either a combined QAPP under Task 1 or separate QAPPs for Task 1 and each of the optional Tasks, if exercised in this Task Order. The contractor shall submit for review and approval the QAPP to the Task Order COR (TOCOR) and the EPA QA officer to be specified by the TOCOR. The contractor will allow a 30 day review period for EPA to evaluate draft and final QAPP deliverables. The QAPP shall conform to EPA G5/M (December 2002, EPA/240/R-02/007) and G5/G (March 2003, EPA/240/R-03/003).

The pollutant of concern is phosphorus and "low dissolved oxygen". The contractor shall review the available reports and data for Conesus Lake and complete the following:

- An early assessment to determine data gaps versus whether additional monitoring is required.
- Source identification and disaggregation by municipal boundaries for stormwater.
- Update identification and quantification pollutant sources, such as land use.
- Re-characterization of phosphorus loads from WWTPs and alternatives to an "all or nothing" approach of restoration scenarios.
- A comprehensive implementation plan including the nine elements that must be addressed in 319 watershed plans.
- Monthly reports to assess progress and conference calls when needed.
- Support the engagement and integration activities of EPA and NYSDEC which may include:
 - coordination with SWCDs, NRCS, dischargers, and farms; and
 - formation of a Citizens Advisory Committee.

The contractor shall produce a technical memorandum that described the contractor's findings and steps suggested to draft a TMDL support document that meets regulatory requirements for a TMDL as specified in Appendix A of this Task Order.

Optional Task 4: Hemlock Lake

Hemlock is AA(T) lake which is also a water supply reservoir for the City of Rochester. Hemlock is NOT currently listed on the 303(d) list but the drinking water use is listed as threatened on the state's Priority Waterbodies List. A TMDL developed for this lake will ensure this drinking water source remains unimpaired. Sampling data should be available, but EPA and NYSDEC are unaware of any other work completed for this waterbody. The contractor shall consult all available sources of modeling and monitoring data which includes, but not limited to, SUNY Brockport, USGS NWIS, EPA's STORET, SWCDs, NRCS, dischargers, and farms.

The contractor shall submit a modeling QAPP(s) as applicable to the activities requested in this task. The contractor may elect to develop either a combined QAPP under Task 1 or separate QAPPs for Task 1 and each of the optional Tasks, if exercised in this Task Order. The contractor shall submit for review and approval the QAPP to the Task Order COR (TOCOR) and the EPA QA officer to be specified by the TOCOR. The contractor will allow a 30 day review period for EPA to evaluate draft and final QAPP deliverables. The QAPP shall conform to EPA G5/M (December 2002, EPA/240/R-02/007) and G5/G (March 2003, EPA/240/R-03/003).

The pollutant of concern is phosphorus. The contractor shall review the available reports and data for Hemlock Lake and complete the following:

- An early assessment to determine data gaps versus whether additional monitoring is required.
- Source identification and disaggregation by municipal boundaries for stormwater.
- Re-characterization of phosphorus loads from WWTPs and alternatives to an "all or nothing" approach of restoration scenarios.
- A comprehensive implementation plan including the nine elements that must be addressed in 319 watershed plans.
- Monthly reports to assess progress and conference calls when needed.
- Support the engagement and integration activities of EPA and NYSDEC which may include:
 - coordination with SWCDs, NRCS, dischargers, and farms; and
 - formation of a Citizens Advisory Committee.

The contractor shall produce a technical memorandum that described the contractor's findings and steps suggested to draft a TMDL support document that meets regulatory requirements for a TMDL as specified in Appendix A of this Task Order.

Optional Task 5: City of Rochester GI assessments

Optional Task 6: Great Lakes GIS support

To the extent that any level of effort remains in this task by June 2015, the contractor will not work on this task further.

C. Schedule Of Benchmarks & Deliverables

All deliverables developed at any time in this work must be provided to the TOCOR in electronic formats that can be supported (i.e. PDF) and can be edited (i.e. Word, Excel) by EPA. All electronic deliverables must also be in a format that can be supported by EPA after the end of the Reports must be of high quality and 508 complaint: Work must reflect a high level of technical proficiency and be clearly explained and documented. The contractor shall include a certification of 508 compliance with each final electronic deliverable (see Section G).

Base Year (to be extended to 08/17/2015):

Task No.	Deliverable	Schedule
1	1.1 QAPP	Submission of Draft QAPP for review and approval within <u>30</u> calendar days of award. Submission of Final QAPP with contractor signatures that incorporates EPA QA Officer comments with <u>14</u> calendar days of receipt of EPA QA Officer's comments.
	1.2 Technical Memorandum	Deliverable within <u>12</u> months of award
	1.3	
	1.4	
2	2.1 QAPP	Submission of Draft QAPP for review and approval within <u>30</u> calendar days of award. Submission of Final QAPP with contractor signatures that incorporates EPA QA Officer comments with <u>14</u> calendar days of receipt of EPA QA Officer's comments.
	2.2 Technical Memorandum	Deliverable within <u>12</u> months of award
	2.3	
	2.4	
3	3.1 QAPP	Submission of Draft QAPP for review and approval within <u>30</u> calendar days of award. Submission of Final QAPP with contractor signatures that incorporates EPA QA Officer comments with <u>14</u> calendar days of receipt of EPA QA Officer's comments.
	3.2 Technical Memorandum	Deliverable within <u>12</u> months of award
	3.3	
	3.4	
4	4.1 QAPP	Submission of Draft QAPP for review and approval within <u>30</u> calendar days of award. Submission of Final QAPP with contractor signatures that incorporates EPA QA Officer comments with <u>14</u> calendar days of receipt of EPA QA Officer's comments.
	4.2 Technical Memorandum	Deliverable within <u>12</u> months of award
	4.3	
	4.4	

Task No.	Deliverable	Schedule
5	5.1 GI assessments	Draft deliverable within <u>10</u> months of award Final deliverable within <u>11</u> months of award
	5.2 GIS Layer	Draft deliverable within <u>10</u> months of award Final deliverable within <u>11</u> months of award
6	6.1 GIS layers	LOE ending May 2015.

D. Validation Of Section 508 Compliance Of Task Order Deliverables

The Contractor shall support the TOPO in conducting a "Final Deliverable Validation" to ensure compliance with Section 508 and the Federal Acquisition Regulations (FAR) related to "electronic and information technology (EIT) deliverables". The Contractor shall furnish certification, in writing, to the TOPO that the Contractor has complied with EPAAR Clause 1552.211-79 "Compliance with EPA Policies for Information Resources Management", including the requirement that all electronic and information technology (EIT) deliverables be Section 508 compliant in accordance with the policies referenced at <http://www.epa.gov/accessibility/>.

E. Notification Of Completion Of Task Order Deliverables

In the event the Task Order reaches thirty (30) days prior to the end of the Period of Performance in a given period, and the contractor assesses that the contractor will not be able to satisfactorily complete any of the benchmarks, milestones, or deliverables by the end of the Performance Period, the contractor shall notify the TOPO and the Contracting Officer (CO) immediately, in writing. Within five (5) business days of said notification, the TOPO, in coordination with the CO, will provide technical direction concerning use of the remaining funding to prepare and furnish to the TOPO: draft deliverables, interim work products, and any necessary working files in an electronic format which is supported by EPA.

F. Contractor Identification

Contractor personnel shall always identify themselves as Contractor employees by name and organization and physically display that information through an identification badge. Contractor personnel are prohibited from acting as the Agency's official representative.

The Contractor shall refer any questions relating to the interpretation of EPA policy, guidance, or regulation to the TOPO.

G. Conference/Meeting Support Guidance

No individual event is anticipated to exceed \$20,000. The contractor shall immediately notify the EPA Contracting Officer, PO and TOPO of any anticipated event involving support for a meeting, conference, workshop, symposium, retreat, seminar or training that may potentially incur \$20,000 or more in cost during performance. Conference expenses are all direct and indirect costs paid by the government and include any associated authorized travel and per diem expenses, room charges for official business, audiovisual use, light refreshments, registration fees, ground transportation and other expenses as defined by the Federal Travel Regulations. All outlays for conference preparation should be included, but the federal employee time for conference preparation should

not be included. After notifying EPA of the potential to reach this threshold, the Contractor shall not proceed with the task(s) until authorized to do so by the Contracting Officer.

H. Quality Assurance Surveillance Plan: Per contract requirements.

I. ATTACHMENTS:

Appendix A: Required Elements of a TMDL Support Document

APPENDIX A

Required Elements of a TMDL Support Document

1. Identification of Waterbody, Pollutant of Concern, Pollutant Sources, and Priority Ranking
 - A. Description of Waterbody and Background Information
 - B. Pollutant of Concern
 - C. Pollutant Sources
 - D. Priority Ranking
 - E. Expressing the TMDL through Surrogate Measures, if applicable
2. Description of the Applicable Water Quality Standards and Numeric Water Quality Target
3. Loading Capacity - Linking Water Quality and Pollutant Sources
 - A. Loading Capacity
 - B. Cause-and-Effect Relationship between Numeric Target and Pollutant
 - C. Critical Condition(s)
4. Load Allocations (LAs)
5. Wasteload Allocations (WLAs)
6. Margin of Safety (MOS)
7. Seasonal Variation
8. Reasonable Assurance
9. Monitoring Plan to Track TMDL Effectiveness
10. Implementation Plan
11. Index of the Administrative Record